

Quality enables saving



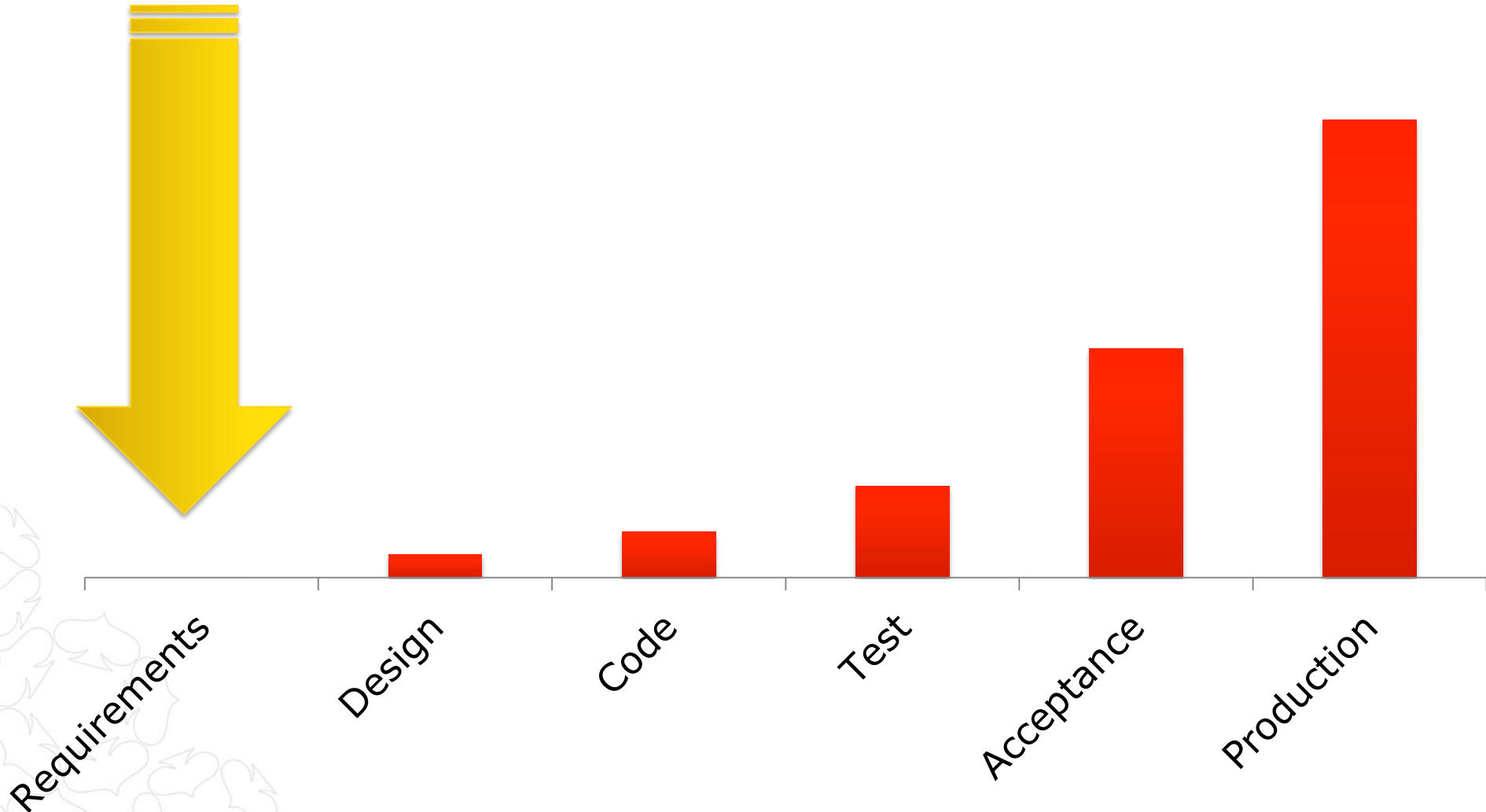
\$1 → \$83

First time Right!



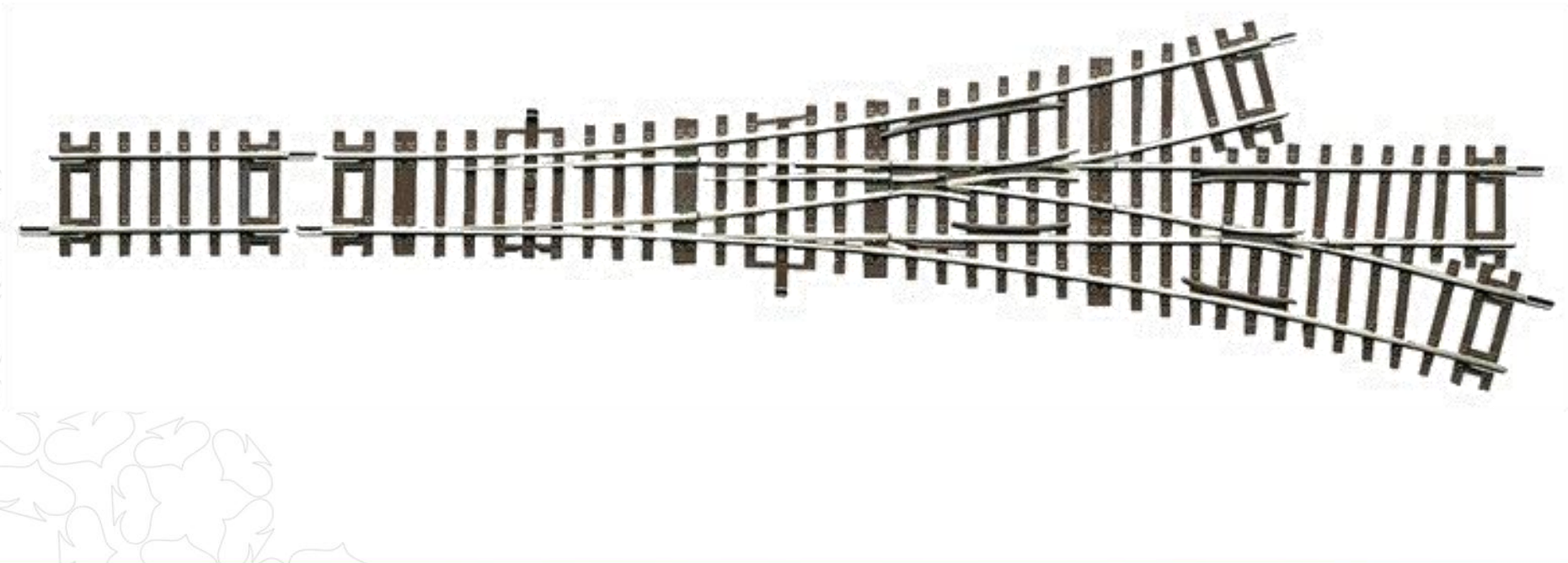
PointZERO®

How do to find defects early?

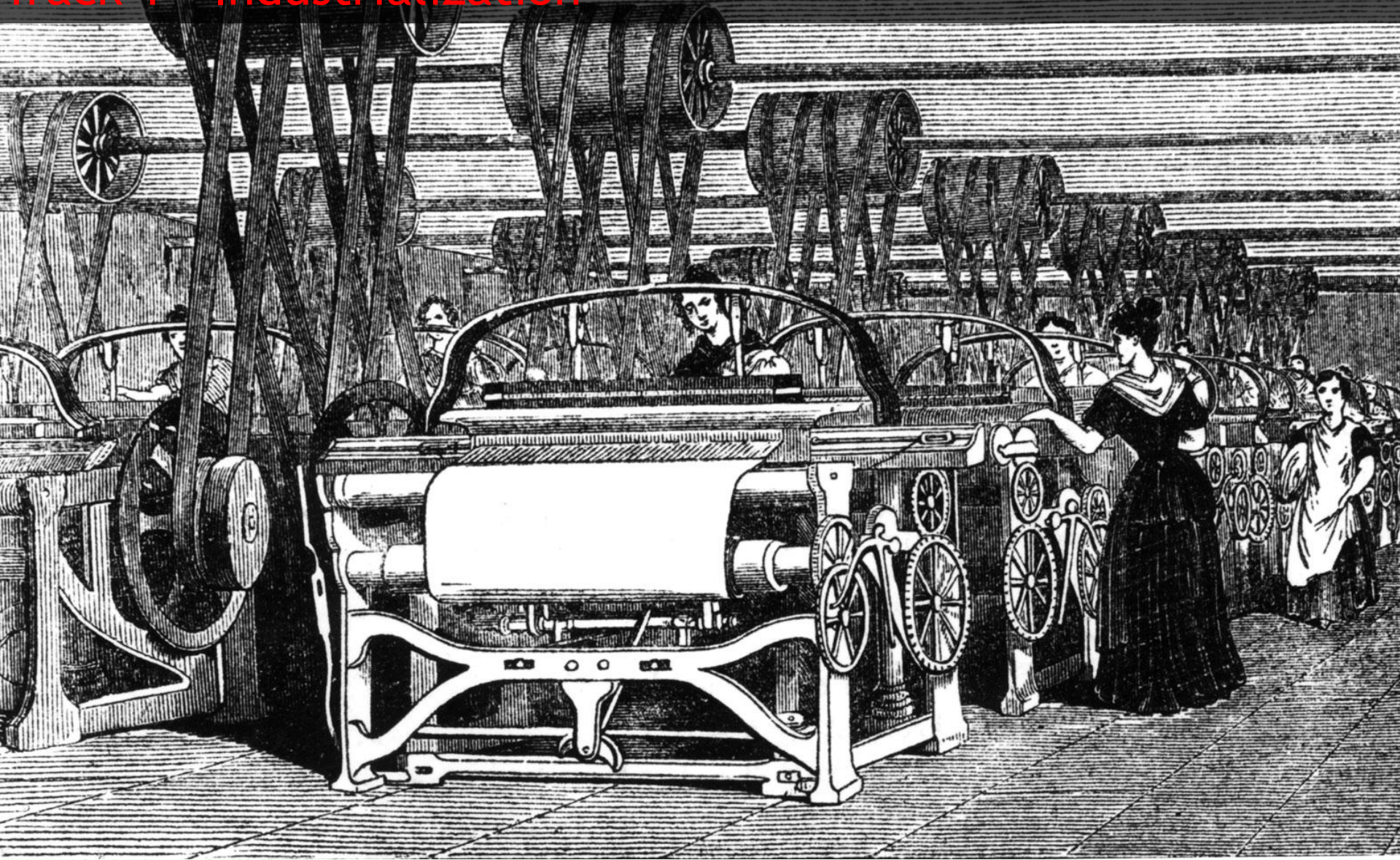


Source: Boehm

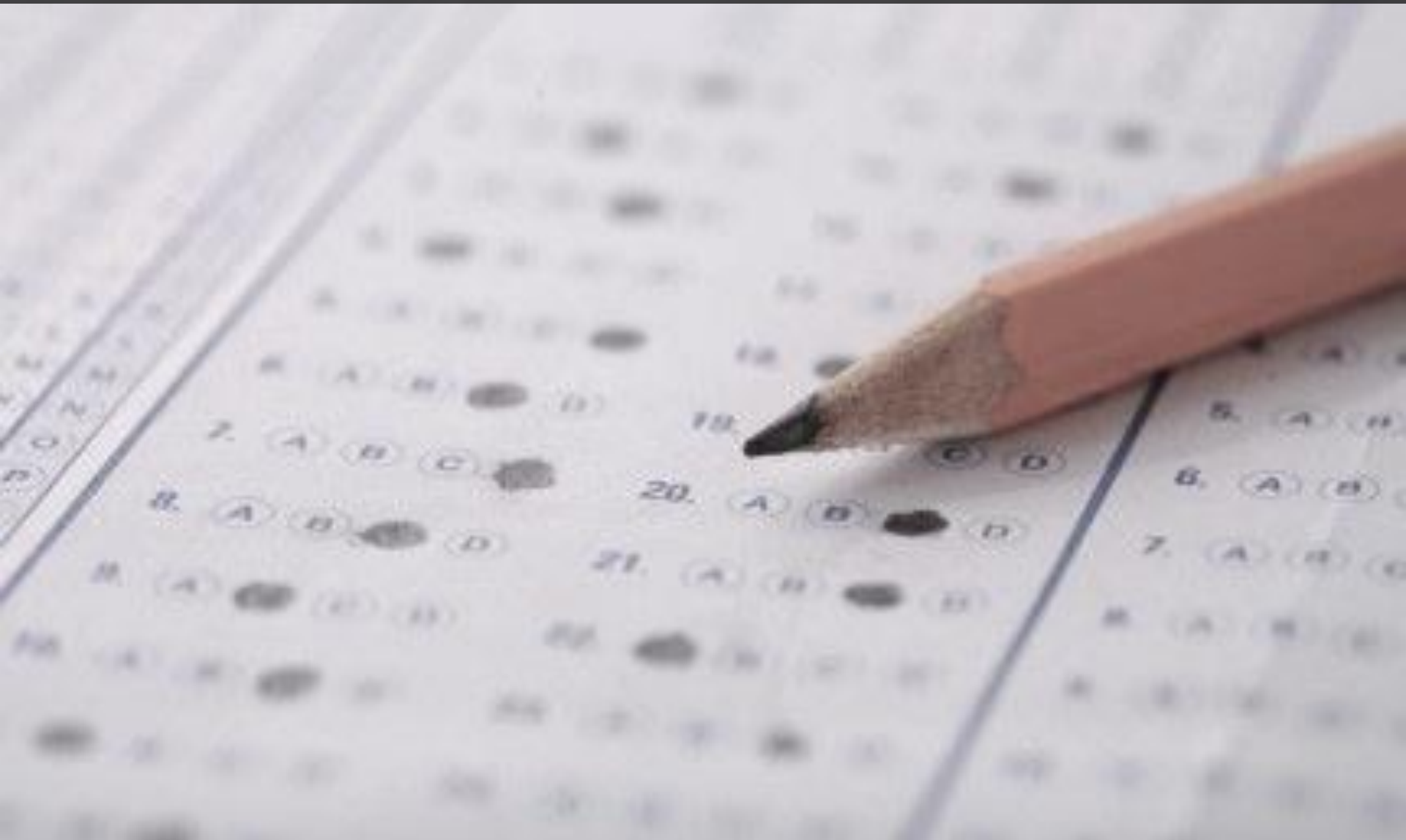
Three track model



Track 1 - Industrialization



Standardization



Test Tooling



Model Based Test Design

"telnet"

,1,8,
 ,1,42,6,15,16,55,16,56,16,57,15,17,58,16,70,8,
 ,1,42,6,61,8,
 ,1,42,7,8,
 ,1,42,66,55,17,59,15,17,64,15,18,60,15,62,15,65,15,71,
 ,1,42,66,56,17,73,8,
 ,1,42,67,16,55,18,63,15,18,72,8,
 ,1,42,66,55,62,61,8,
 ,1,42,66,55,65,61,8,
 ,1,42,66,55,71,8,
 ,1,42,66,56,18,63,61,8,
 ,1,42,66,56,62,61,8,
 ,1,42,66,56,65,61,8,
 ,1,42,66,56,71,8,
 ,1,42,66,57,61,8,
 ,1,42,68,58,17,58,18,63,61,8,
 ,1,42,67,17,58,62,15,17,58,65,15,17,58,71,8,
 ,1,42,68,59,61,8,
 ,1,42,69,60,61,8,
 ,1,42,68,64,61,8,
 ,1,42,66,70,8,
 ,1,42,67,18,63,61,8,
 ,1,42,67,62,61,8,
 ,1,42,67,65,61,8,
 ,1,42,67,71,8,
 ,1,42,68,73,8,
 ,1,42,69,63,61,8,
 ,1,42,69,72,8,

Input used:

 Decision [1]

 42,6

 42,7

 7,8

 42,66

 42,67

 42,68

 42,69

 Decision [2]

 1,8

 1,42

 Decision [3]

 6,15

 6,61

 61,8

 57,15

 57,61

 59,15

 59,61

 60,15

 60,61

 62,15

 62,61

 63,15

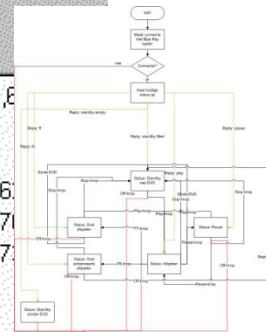
 63,61

 64,15

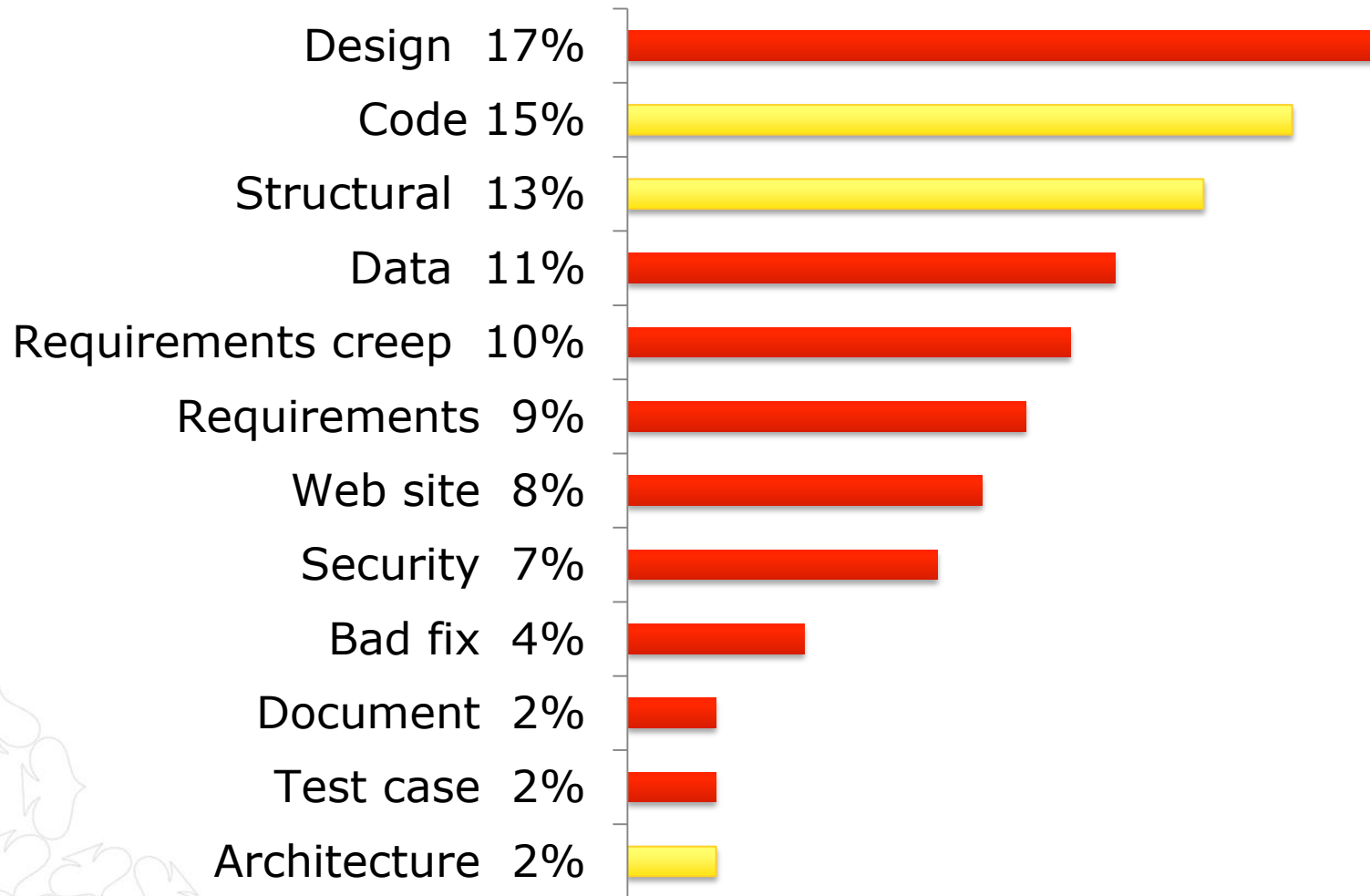
 64,61

7,8,
 8,
 61,8,
 70,8,
 71,8,
 72,8,
 73,8,

6,7,66,67,6
 8,42
 15,61
 16,17,18,6
 55,56,57,7
 58,59,64,7
 60,63,72



Structural quality: 30% of major defects



Source: Capers Jones, 2011

Performance Testing



Move away from Insanity

**“Insanity: Doing the
same thing over and
over again and
expecting different
results”**

- Albert Einstein

Track 2 - Quality & Collaboration



QG: Handover moments

